

IN THE CLAIMS

Please amend Claims 1, 4 and 6, and add Claims 14 through 24, as follows:

1. (Twice Amended) A plug, comprising:

a first base bearing a keyway providing a first electrical conductor and an orifice spaced-apart from and separated by a mass of said plug from said keyway;

a second base separated by an axial length of said plug from said first base, said second base bearing means for supporting a cam, said mass being perforated by a plurality of radially oriented apertures forming [a linear arrays] an array;

an exterior surface extending between and engaging said first base and said second base;

a sidebar positioned between said first base and said second base to reciprocate between a first location with said sidebar simultaneously engaging said plug and a cylinder surrounding said plug, and a second location releasing said plug for rotation relative to the cylinder;

locking means disposed within said apertures to reciprocate relative to said plug in response to a key inserted into said keyway to accommodate reciprocation of said sidebar relative to said plug and rotation of said plug relative to [a] the cylinder [surrounding said plug] when the key while inserted into said keyway engages in a selected relation with said locking means, and [engaging the cylinder] obstructing said reciprocation absent said selected relation;

a second electrical conductor terminating with an electrical contact exposed to an exterior of said first base through said orifice;

19 an electronic logic circuit borne by said plug while coupled to receive electrical power
20 and data signals via said first and second electrical conductors, and generating control signals in
21 dependence upon said electrical power and data signals; and

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22 an electrical operator disposed within one of said apertures, said operator having a
23 distal member travelling in dependence upon said control signals between a first position relative
24 to said exterior surface [enabling rotation of] accommodating said [plug in relation to a cylinder
25 surrounding said plug] reciprocation and a second and different position relative to said exterior
26 surface obstructing said [rotation of said plug in relation the cylinder] reciprocation.

1 4. (Amended) The plug of claim 1, with said electrical operator maintaining said distal
2 member within said plug with said distal member extended not beyond said exterior surface while
3 said distal member is in said first position, and maintaining said [distal member] sidebar in
4 concurrent engagement with said plug and with the cylinder while said distal member is in said
5 second position.

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1 6. (Twice Amended) A lock, comprising:
2 a cylinder containing a hollow recess defining a longitudinal axis;
3 a plug bearing a plurality of open radially oriented apertures forming [a linear] an
4 array, said plug being rotatable around said longitudinal axis while resident within said hollow
5 recess, said plug comprising:
6 a first base bearing a keyway providing a first electrical conductor and an

7 orifice spaced-apart from and separated by a mass of said plug from said keyway;

8 a second base separated by an axial length of said plug from said first base,
9 said second base bearing means for supporting a cam;

10 an exterior surface extending between and engaging said first base and said
11 second base;

12 a sidebar positioned between said first base and said second base to reciprocate
13 between a first location with said sidebar simultaneously engaging said plug and said cylinder
14 surrounding said plug, and a second location releasing said plug for rotation relative to the cylinder;

15 locking means disposed within said apertures to reciprocate relative to said
16 cylinder in response to a key inserted into said keyway to accommodate reciprocation of said
17 sidebar relative to [rotation of] said plug relative to [a] said cylinder [surrounding said plug]
18 when the key while inserted into said keyway engages in a selected relation with said locking
19 means and [engaging the cylinder] obstructing said reciprocation absent said selected
20 relation;

21 a second electrical conductor terminating with an electrical contact exposed
22 to an exterior of said first base through said orifice;

23 an electronic logic circuit borne by said plug, coupled to receive electrical
24 power and data signals via said first and second electrical conductors, and generating control
25 signals in dependence upon said electrical power and data signals; and

26 an electrical operator borne by said plug, disposed within one of said
27 apertures, said operator having a distal member radially reciprocating along an axis

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28 transverse to said longitudinal axis, in dependence upon said control signals between a first
29 position relative to said exterior surface [enabling said rotation of] accommodating said
73 30 [plug in relation to said cylinder surrounding said plug] reciprocation and a second and
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32 means, said [rotation of said plug in relation said cylinder] reciprocation.

1 --14. A lock, comprising:

2 a cylinder containing a hollow interior recess defining a longitudinal axis, and bearing
3 a slot within said recess; and

74 4 a plug rotatable from a rest orientation around said longitudinal axis while resident
5 within said hollow recess relative to said cylinder; and

6 a bar positioned between said first end and second end while extending into said slot,
7 and providing simultaneous engagement of said cylinder and said plug while said cylinder remains
8 in said rest orientation;

9 said plug comprising:

10 a first base bearing a keyway providing a first electrical conductor and an
11 orifice spaced-apart from and separated by a mass of said plug from said keyway;

12 a second base separated by an axial length of said plug from said first base,
13 said second base disposed to support a cam, said mass being perforated by a radially oriented
14 aperture;

15 an exterior surface extending between said first base and said second base;

16 retaining means oriented to retain a shank of a key inserted into said keyway
17 while said plug remains in an orientation other than said rest orientation relative to said
18 cylinder, and to accommodate withdrawal of the key from said keyway while said plug is in
19 said rest orientation;

20 a second electrical conductor terminating with an electrical contact exposed
21 to an exterior of said first base through said orifice;

22 an electronic logic circuit comprising a memory storing a code, said circuit
23 being borne by said plug and coupled to receive electrical power and data signals via said
24 first and second electrical conductors, said circuit generating control signals in dependence
25 upon correspondence between said code and information borne by said data signals; and
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27 an electrical operator borne by said plug, said operator having a distal member
28 travelling in dependence upon said control signals between a first position relative to said
29 exterior surface maintaining said simultaneous engagement and a second and different
30 position relative to said exterior surface accommodating movement between said plug and
said cylinder.

1 ✓ --15. The lock of claim 14, further comprising:

2 said bar comprising a sidebar positioned between said first base and said second base
3 to reciprocate between a first location while providing said ~~said~~ simultaneous engagement, and a
4 second location releasing said plug for rotation relative to said cylinder; and

5 said distal member being oriented within said plug to move relative to said plug to

6 accommodate reciprocation of said sidebar relative to said plug and rotation of said plug from said
7 rest orientation relative to the cylinder when a key while inserted into said keyway generates said
8 data signals representing information having a selected said correspondence with said code, and
9 obstructing said reciprocation absent said selected correspondence.

1 --16. The lock of claim 14, further comprising:

2 said bar comprising an arm arcuately engaging said cylinder and a detent extending
3 from said arm and through said slot; and

4 said distal member being oriented within said plug to move relative to said plug to
5 accommodate passage of said detent relative to said distal member during rotation of said plug from
6 said rest orientation relative to the cylinder when a key while inserted into said keyway generates
7 said data signals representing information having a selected said correspondence with said code, and
8 obstructing said rotation of said plug from said rest orientation by engaging said detent absent said
9 selected correspondence.

1 --17. The lock of claim 14, further comprising:

2 said bar comprising an arm arcuately engaging said cylinder and a detent extending
3 from said arm and through said slot; and

4 said distal member being oriented within said plug to move relative to said plug to
5 accommodate passage of said detent relative to said distal member during rotation of said plug from
6 said rest orientation relative to the cylinder when a key while inserted into said keyway generates

7 said data signals representing information having a selected said correspondence with said code,
8 obstructing said rotation of said plug from said rest orientation by engaging said detent absent said
9 selected correspondence, and accommodating passage of said detent relative to said distal member
10 during rotation of said plug from an orientation other than said rest orientation to said rest
11 orientation.

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--18. The lock of claim 14, further comprising:

2 said bar comprising an arm arcuately engaging said cylinder and a detent extending
3 from said arm and through said slot; and

4 said distal member being oriented within said plug to move relative to said plug to
5 accommodate passage of said detent relative to said distal member during rotation of said plug from
6 said rest orientation relative to the cylinder when a key while inserted into said keyway generates
7 said data signals representing information having a selected said correspondence with said code, and
8 obstructing said rotation of said plug from said rest orientation by engaging said detent absent said
9 selected correspondence when said rotation is in a first direction, and accommodating said rotation
10 of said plug from said rest orientation despite an absence of said selected correspondence when said
11 rotation is in a second and opposite direction.

1 --19. The lock of claim 14, further comprising:

2 said bar comprising an arm arcuately engaging said cylinder and a detent extending
3 from said arm and through said slot; and

4 said distal member being oriented within said plug in an engagement of said detent
5 to obstruct said rotation of said plug from said rest orientation, and to move relative to said plug
6 from said engagement of said detent obstructing said rotation of said plug from said rest orientation
7 to an accommodation of passage of said detent relative to said distal member during rotation of said
8 plug from said rest orientation relative to the cylinder when a key while inserted into said keyway
9 generates said data signals representing information having a selected said correspondence with said
code, and continuing said accommodation despite intermittent removal of the key from said keyway.

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1 --20. The lock of claim 14, further comprising:

2 said bar comprising an arm arcuately engaging said cylinder and a detent extending
3 from said arm and through said slot; and

4 said distal member being oriented within said plug in an engagement of said detent
5 to obstruct said rotation of said plug from said rest orientation, and to move relative to said plug
6 from said engagement of said detent obstructing said rotation of said plug from said rest orientation
7 to an accommodation of passage of said detent relative to said distal member during rotation of said
8 plug from said rest orientation relative to the cylinder when a key while inserted into said keyway
9 generates said data signals representing information having a selected said correspondence with said
10 code, and continuing said accommodation despite intermittent removal of the key from said keyway
11 absent subsequent said generation of data signals representing information having said selected
12 correspondence with said code.

1 --21. The lock of claim 16, further comprising:

2 a sidebar positioned between said first base and said second base to provide
3 reciprocation between a first location with said sidebar providing simultaneous engagement with said
4 plug and said cylinder, and a second location releasing said plug for rotation relative to the cylinder;
5 and

6 an electrical solenoid borne by said plug, said solenoid having a distal armature
7 travelling in dependence upon said control signals between a third position relative to said exterior
8 surface maintaining said simultaneous engagement and a fourth and different position relative to said
9 exterior surface accommodating said reciprocation.

1 --22. The lock of claim 17, further comprising:

2 a sidebar positioned between said first base and said second base to provide
3 reciprocation between a first location with said sidebar providing simultaneous engagement with said
4 plug and said cylinder, and a second location releasing said plug for rotation relative to the cylinder;
5 and

6 an electrical solenoid borne by said plug, said solenoid having a distal armature
7 travelling in dependence upon said control signals between a third position relative to said exterior
8 surface maintaining said simultaneous engagement and a fourth and different position relative to said
9 exterior surface accommodating said reciprocation.

1 --23. The lock of claim 18, further comprising:

2 a sidebar positioned between said first base and said second base to provide
3 reciprocation between a first location with said sidebar providing simultaneous engagement with said
4 plug and said cylinder, and a second location releasing said plug for rotation relative to the cylinder;
5 and

6 an electrical solenoid borne by said plug, said solenoid having a distal armature
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Con 4 travelling in dependence upon said control signals between a third position relative to said exterior
surface maintaining said simultaneous engagement and a fourth and different position relative to said
9 exterior surface accommodating said reciprocation.

1 --24. The lock of claim 19, further comprising:

2 a sidebar positioned between said first base and said second base to provide
3 reciprocation between a first location with said sidebar providing simultaneous engagement with said
4 plug and said cylinder, and a second location releasing said plug for rotation relative to the cylinder;
5 and

6 an electrical solenoid borne by said plug, said solenoid having a distal armature
7 travelling in dependence upon said control signals between a third position relative to said exterior
8 surface maintaining said simultaneous engagement and a fourth and different position relative to said
9 exterior surface accommodating said reciprocation.
